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February 15, 2006

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Mr. Leland Smith
Pipeline Excavators
P.O. Box 1755
Sebastopol, California 95473-1755

**Subject: 4th Quarter 2005 Monitoring Report
Pipeline Excavators, 5715 Sebastopol Road, Sebastopol, California
SCDHS-EHD Site #00001115; NCRWQCB Site #1TSO641**

Dear Mr. Smith:

This report presents the results of the 4th Quarter 2005 groundwater monitoring and sampling event performed at the subject site. The site is approximately located as shown on the attached Site Location Map, Plate 1. This work was performed in accordance with recommendations from Mr. Dale Radford of the Sonoma County Department of Health Services Environmental Health Division (SCDHS-EHD).

Monitoring and Domestic Well Sampling

On December 6, 2005, groundwater samples were collected from monitoring wells MW-1, MW-2, and MW-4 through MW-7, and domestic wells DW-6100 and DW-6140. The approximate well locations and general site features are shown on the attached Site Plan/Groundwater Elevation Contour Map, Plate 2. Efforts were made to remove debris located at the bottom of monitoring well MW-5 during this sampling event. Although the majority of the debris was removed, some of the larger rocks could not be extracted and does not appear to affect the results. Prior to sampling, static water levels were measured and each monitoring well was checked for the presence of free product using an oil/water interface probe. No free product was reported during this monitoring event. To produce representative groundwater samples, the monitoring wells were then purged of approximately three well casing volumes using a submersible pump. In addition, the indicator parameters such as the temperature, pH, and conductivity were measured during purging and recorded on the attached Groundwater Field Sampling Forms, Appendix A. The water level in each monitoring well was then allowed to sufficiently recover prior to sampling. Groundwater samples were collected using a new disposable bailer for each well and transferred into the appropriate containers supplied by the laboratory. The domestic well at 6100 Sebastopol Road (DW-6100) was sampled through the hose bib located on top of the well casing. Water was allowed to run for approximately five minutes before samples were obtained. The domestic well located at 6140 Sebastopol Road (DW-6140) is currently non-operational and the pump was removed to allow sample collection with a disposable bailer. Groundwater removed from the monitoring wells during purging and rinse water is stored onsite in 55-gallon DOT-approved drums labeled with non-hazardous waste designations, pending

disposal. The groundwater samples collected were labeled, stored on ice, and then transported under chain-of-custody documentation to Kiff Analytical LLC of Davis, California for chemical analysis.

Water Level Measurements

Monitoring well top-of-casing (TOC) elevations, depths-to-groundwater, the calculated water level elevations, and the calculated groundwater flow direction and gradient for the December 6, 2005 sampling event are presented in Table 1. Elevations are expressed in feet relative to mean sea level (msl), depths are expressed in feet, and the gradient is expressed in feet per foot. Historical groundwater flow directions and gradient data are presented in Appendix B.

Table 1: Groundwater Flow Direction and Gradient

Sample Date	Monitoring Well ID	TOC Elevation (feet - msl)	Water Level Depth (feet)	Water Level Elevation (feet -msl)	Groundwater Flow Direction/Gradient (i)	
12/06/05	MW-1	70.83	2.99	67.84	Southwesterly i = 0.01	
	MW-2	70.95	2.78	68.17		
	MW-3	----removed----				
	MW-4	74.05	5.84	68.21		
	MW-5	74.14	5.73	68.41		
	MW-6	70.16	2.83	67.33		
	MW-7	70.35	4.34	66.01		

Groundwater elevation contours based on wells MW-1, MW-2, and MW-4 through MW-7 for the December 6, 2005 sampling event are shown on Plate 2.

Laboratory Chemical Analysis

Groundwater samples collected from the monitoring and domestic wells were analyzed for total petroleum hydrocarbons (TPH) as gasoline (g) and TPH as diesel (d) using Environmental Protection Agency (EPA) Test Methods 8260 and 8015, respectively. The volatile organic compounds: benzene, toluene, ethyl benzene, and total xylenes (BTEX), the additional oxygenated fuel additives, including methyl tert- butyl ether (MtBE), and the lead scavengers were analyzed using EPA Test Method 8260B. The laboratory chemical results are presented on page 3, Table 2. TPH-g, TPH-d, BTEX, and MtBE results are expressed in units of micrograms per liter ($\mu\text{g/L}$). The laboratory analytical reports and chain-of-custody documentation are attached in Appendix C. Historical groundwater analytical results are presented in Appendix D. Time vs. Concentration Graphs that plot concentrations of TPH-g, TPH-d, benzene, and MtBE over time for MW-1 and MtBE concentrations over time for MW-2, and MW-4 through MW-7 are presented as Appendix E.



Table 2: Groundwater Analytical Results

Sample Date	Sample ID	TPH - g	TPH - d	B	T	E	X	MtBE
		µg/L						
12/06/05	MW-1	1,200	1,500	<0.50	<0.50	<0.50	<0.50	60 *
	MW-2	<50	130	<0.50	<0.50	<0.50	<0.50	13
	MW-3	----removed----						
	MW-4	<50	150	<0.50	<0.50	<0.50	<0.50	170
	MW-5	<50	220**	<0.50	<0.50	<0.50	<0.50	11
	MW-6	<50	69	<0.50	<0.50	<0.50	<0.50	6.2
	MW-7	<50	<50	<0.30	<0.30	<0.50	<0.50	41 +
	DW-6100	<50	<50	<0.30	<0.30	<0.50	<0.50	
	DW-6140	<50	<50	<0.50	<0.50	<0.50	<0.50	

< = Less than the laboratory test method detection limit.
 + = 1,2-Dichloroethane detected at 4.4 µg/L.
 * = Tert-butyl alcohol (TBA) detected at 7.3 µg/L.
 ** = Hydrocarbons reported as TPH as diesel do not exhibit a typical diesel chromatographic pattern. These hydrocarbons are higher boiling than typical diesel fuel.

Discussion

During this sampling event, TPH-g was detected in the samples collected from MW-1 at a concentration of 1,200 µg/L. TPH-d was detected in the sample collected from MW-1, MW-2, MW-4, MW-5, and MW-6 at concentrations of 1,500 µg/L, 130 µg/L, 150 µg/L, 220 µg/L, and 69 µg/L. However, the laboratory reported that the sample analysis for MW-5 indicated the presence of hydrocarbons higher in molecular weight than diesel. MtBE was detected in monitoring wells MW-1, MW-2, MW-4, MW-5, MW-6, MW-7 with a maximum concentration of 170 µg/L detected in the samples collected from well MW-4. The oxygenated fuel additive tert-butyl alcohol (TBA) was detected in the samples collected from well MW-1 at a concentration of 7.3 µg/L. The lead scavenger 1,2-dichloroethane (EDC) was detected in the samples collected from MW-7 at a concentration of 4.4 µg/L. The samples collected from DW-6100 and DW-6140 are below the reported laboratory detection limits for the analyses requested.

In general, the analytical results indicate a decrease in historical gasoline constituent contamination trends down gradient and side gradient from the former excavation area. Additionally, the analytical results indicate an increasing trend of MtBE impact in monitoring well MW-4, up gradient from the identified source area and closest to the eastern property boundary. Recent detections of TPH-d in wells MW-2, MW-4, MW-5, and MW-6 do not appear to be significant relative to historical trends and may be the result of differing laboratory interpretation. The last two sampling events have been analyzed by a new laboratory.



After discussions with SCDHS-EHD representatives, we request to retract our recommendation for a work plan to define the contamination plume along the eastern property line of the subject site. We understand that the responsible party for the leaking underground tank site to the east of the subject site (Week's Drilling and Pump) are currently in the process of defining the lateral extent of contamination to groundwater. It is expected that said investigation of the contamination plume will extend westerly of their former UST and the property line.

We are completing supplemental data in support of our recommendation for closure of domestic well DW-6140.

Our next sampling event is scheduled for March 2006.

We appreciate the opportunity to be of service to you and trust that this provides the information you require at this time. If you have any questions or require any additional information, please feel free to contact us at (707) 575-8622 or www.transtechconsultants.com.

Sincerely,
TRANS TECH CONSULTANTS



Brian R. Hasik
Staff Geologist



Bill C. Wiggins, P.E.
Registered Civil Engineer

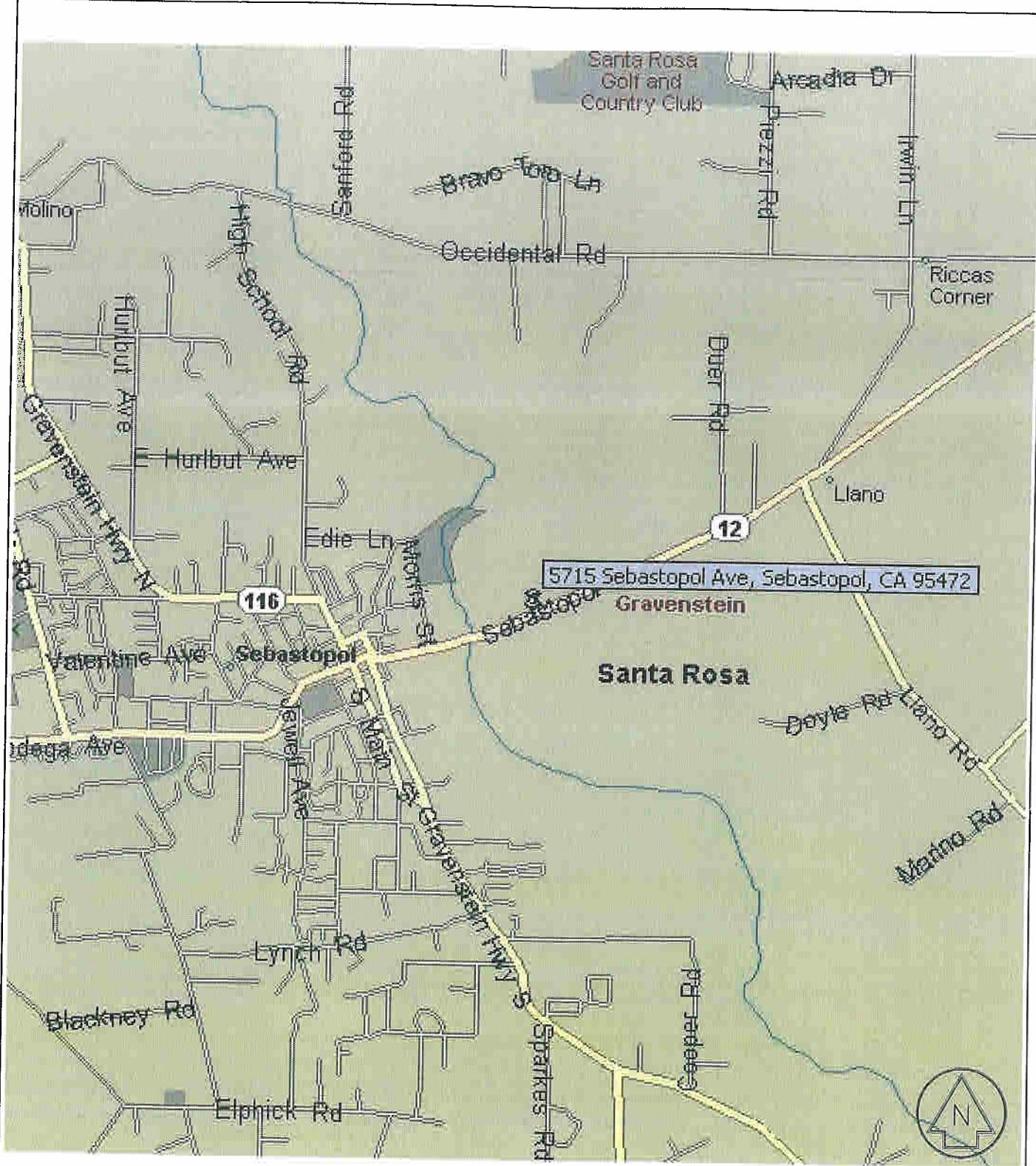


QMR_1301_01_021506

Attachments:

- Plate 1, Site Location Map
- Plate 2, Site Plan/Groundwater Elevation Contour Map
- Appendix A, Groundwater Field Sampling Forms
- Appendix B, Historical Groundwater Elevation and Gradient Data
- Appendix C, Kiff Analytical Laboratory Report dated December 14, 2005
- Appendix D, Historical Groundwater Analytical Results
- Appendix E, Time vs. Concentration Graphs for MW-1, MW-2, MW-4 through MW-7
- Distribution List





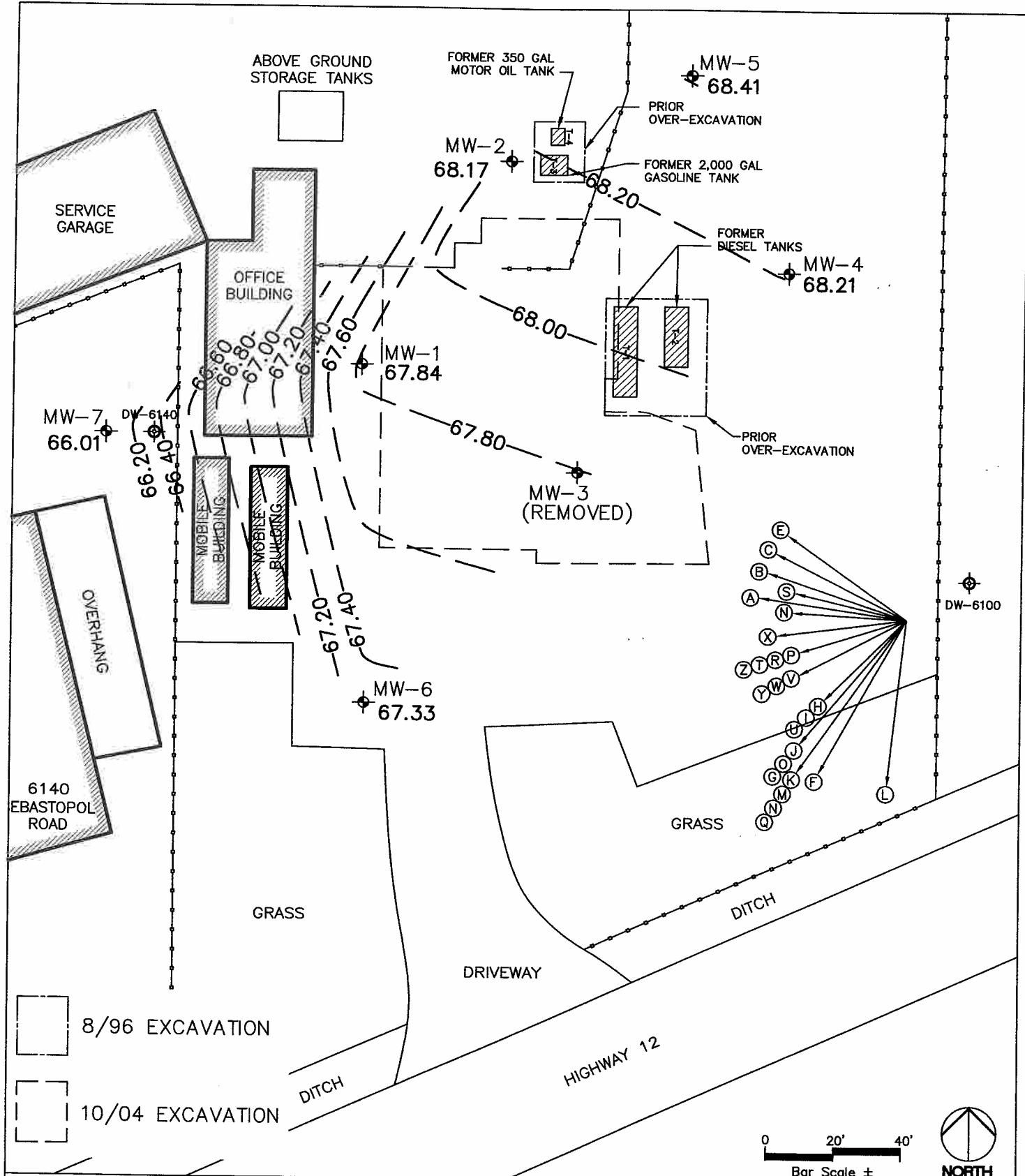
930 SHILOH RD., BLDG 44, SUITE J
WINDSOR, CA 95492
PHONE: 707-575-8622 FAX: 707-837-7334

SITE LOCATION MAP

PIPELINE EXCAVATORS
5715 SEBASTOPOL ROAD
SEBASTOPOL, CALIFORNIA

PLATE:
1

DRAWN BY: PSC	DWG NAME: 1301.01 SLM	APPR. BY: BCW	JOB NUMBER: 1301.01	W.O. NUMBER: A-228	REVISIONS:	DATE: 12/23/03
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TRANS TECH CONSULTANTS

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SITE PLAN/GROUNDWATER ELEVATION CONTOUR MAP FOR 12/6/05

PIPELINE EXCAVATORS
5715 SEBASTOPOL ROAD
SEBASTOPOL, CALIFORNIA

PLATE:

2

SHEET: 1 OF 2

DRAWN BY:	DWG NAME:	APPR. BY:	JOB NUMBER:	W.O. NUMBER:	REVISIONS:	DATE:
PSC	1301.01 GWFP	BRH	1301.01	A-885		12/19/05

APPENDIX A

APPENDIX A

APPENDIX A

APPENDIX A

APPENDIX A

GROUNDWATER FIELD SAMPLING FORM

WELL INFORMATION

Project Number/Name: 1301.01 Pipeline Excavators		Well Number: MW-1					
Project Location: 5715 Sebastopol Road Sebastopol, California		Casing Diameter: 2"	Well Depth from TOC (BP): 8.15 Well Depth from TOC (AP):				
Date: December 6, 2005		Top of Screen:	Initial Well Depth:				
Sampled by (print and sign): Brian Hasik <i>(BLH)</i>		Product Thickness in inches: 8					
Notes: HC 0007 "OLD" <i>Jug @ 3g</i>		Water Level from TOC: 2.99	Time: 12:11				
		Water Level pre-purge: 2.99	Time: 1:07				
		Well Type: <input checked="" type="checkbox"/> Monitor <input type="checkbox"/> Extraction <input type="checkbox"/> Other:					
		Well EL (TOC):	Well Mat: PVC				
WEATHER							
Wind: Yes / No	Clouds: Yes / No	Sun: Yes / No	Precipitation in last 5 days: Yes / No				
Rain: Yes / No	Fog: Yes / No						
VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING							
TD	WL	Dia. Inches	($\text{TD} - \text{WL}$) X 2 X 0.0408 = 0.83 gallons in one well volume				
2.48			gallons in 3 well volumes (Approx. 0.6 gal/ft) 3 total gallons purged				
FIELD MEASUREMENTS DURING PURGING							
Stable Field Parameters Required Prior to Sample Collection <10% pH and EC change, <0.2°C temp. change							
Time	Gallons	pH	TEMP °C	ORP	DO mg/L	EC mS / µS	Turbidity H/M/L
1:09	1	6.67	19.5	-31		2260	L
1:09	2	6.68	19.7	-41		2190	L
1:10	3	6.67	20.4	-56		2335	L
Minimum of 5 gallons or 0.6 gal/ft. Of water in casing - whichever is greater and field parameters must be stable.							
Water Level Before Sampling: 2.98		Time: 2:50					
Appearance of Sample:							
Bailer: Disposable	Pump: 12V Submersible (1-2 gpm)						
DECON. METHOD: TSP or Liquinox (phosphate free) Wash / Double Rinse							
NUMBER OF DRUMS GENERATED:		Water: <i>8</i>	Soil: <i>8</i>	Other: <i>8</i>			

DRum OK

GROUNDWATER FIELD SAMPLING FORM

WELL INFORMATION

Project Number/Name: 1301.01 Pipeline Excavators		Well Number: MW-2
Project Location: 5715 Sebastopol Road Sebastopol, California		Casing Diameter: 2"
		Well Depth from TOC (BP): 8, 10 Well Depth from TOC (AP):
Date: December 6, 2005		Top of Screen: Initial Well Depth:
Sampled by (print and sign): Brian Hasik <i>Brian</i>		Product Thickness in inches: <i>Q</i>
		Water Level from TOC: 2.78 Time: 12:05
Notes:		Water Level pre-purge: 2.78 Time: 12:32
		Well Type: <input checked="" type="checkbox"/> Monitor <input type="checkbox"/> Extraction <input type="checkbox"/> Other:
		Well EL (TOC): Well Mat: PVC

WEATHER

Wind: Yes / No	Clouds: Yes / No	Sun: Yes / No	Precipitation in last 5 days: Yes / No
Rain: Yes / No	Fog: Yes / No		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

(TD - WL) X (Dia. Inches)² X 0.0408 = 0.85 gallons in one well volume
2.55 gallons in 3 well volumes (Approx. 0.6 gal/ft) 4 total gallons purged

FIELD MEASUREMENTS DURING PURGING

Stable Field Parameters Required Prior to Sample Collection <10% pH and EC change, <0.2°C temp. change

Time	Gallons	pH	TEMP °C	ORP	DO mg/L	EC mS / µS	Turbidity H/M/L
12:35	1	6.86	19.3	77		2693	L
12:36	2	6.86	19.5	83		2695	L
12:37	3	6.88	19.6	86		2693	L
12:38	4	6.88	19.8	89		2698	L

Minimum of 5 gallons or 0.6 gal/ft. Of water in casing - whichever is greater and field parameters must be stable.

Water Level Before Sampling: 2.78 Time: 2:20

Appearance of Sample:

Bailer: Disposable Pump: 12V Submersible (1-2 gpm)

DECON. METHOD: TSP or Liquinox (phosphate free) Wash / Double Rinse

NUMBER OF DRUMS GENERATED: Water: 3 Soil: 8 Other: 0

GROUNDWATER FIELD SAMPLING FORM

WELL INFORMATION

Project Number/Name:	1301.01 Pipeline Excavators		Well Number:	MW-4
Project Location:	5715 Sebastopol Road Sebastopol, California	Casing Diameter:	2"	Well Depth from TOC (BP): 10.40 Well Depth from TOC (AP):
Date:	December 6, 2005	Top of Screen:	Initial Well Depth:	
Sampled by (print and sign):	Brian Hasik <i>(Signature)</i>	Product Thickness in inches:		
Notes:	Water Level from TOC: 5.84		Time:	12:07
	Water Level pre-purge: 5.84		Time:	12:47
	Well Type: <input checked="" type="checkbox"/> Monitor <input type="checkbox"/> Extraction <input type="checkbox"/> Other:			
	Well EL (TOC):		Well Mat: PVC	

WEATHER

Wind: Yes / No	Clouds: Yes / No	Sun: Yes / No	Precipitation in last 5 days: Yes / No
Rain: Yes / No	Fog: Yes / No		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

$$(\frac{\text{TD}}{\text{WL}} - \frac{\text{WL}}{\text{WL}}) \times (\frac{\text{WL}}{\text{Dia. Inches}})^2 \times 0.0408 = 0.73 \text{ gallons in one well volume}$$

2.19 gallons in 3 well volumes (Approx. 0.6 gal/ft) *7* total gallons purged

FIELD MEASUREMENTS DURING PURGING

Stable Field Parameters Required Prior to Sample Collection <10% pH and EC change, <0.2°C temp. change

Time	Gallons	pH	TEMP °C	ORP	DO mg/L	EC mS/µS	Turbidity H/M/L
12:57	1	6.76	19.8	97		2227	1
12:58	2	6.74	20.1	92		2250	1
12:59	3	6.77	20.2	86		2257	1
12:59	4	6.76	20.3	94		2225	1

Minimum of 5 gallons or 0.6 gal/ft. Of water in casing - whichever is greater and field parameters must be stable.

Water Level Before Sampling: 5.86 Time: 12:30

Appearance of Sample:

Bailer: Disposable Pump: 12V Submersible (1-2 gpm)

DECON. METHOD: TSP or Liquinox (phosphate free) Wash / Double Rinse

NUMBER OF DRUMS GENERATED: Water: 4 Soil: 8 Other: 0

GROUNDWATER FIELD SAMPLING FORM

WELL INFORMATION

Project Number/Name: 1301.01 Pipeline Excavators		Well Number: MW-5
Project Location: 5715 Sebastopol Road Sebastopol, California		Casing Diameter: 2"
Date: December 6, 2005		Top of Screen: Initial Well Depth:
Sampled by (print and sign): Brian Hasik <i>(Signature)</i>		Product Thickness in inches: 0
		Water Level from TOC: 5-73* / 5.74 Time: 10:55 / 10:42
Notes: X use for gwF		Water Level pre-purge: Time:
		Well Type: <input checked="" type="checkbox"/> Monitor <input type="checkbox"/> Extraction <input type="checkbox"/> Other:
		Well EL (TOC): Well Mat: PVC

WEATHER

Wind: Yes <input checked="" type="checkbox"/> No	Clouds: Yes <input checked="" type="checkbox"/> No	Sun: Yes <input checked="" type="checkbox"/> No	Precipitation in last 5 days: Yes <input checked="" type="checkbox"/> No
Rain: Yes <input checked="" type="checkbox"/> No	Fog: Yes <input checked="" type="checkbox"/> No		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

$$\begin{array}{c}
 (\text{TD} - \text{WL}) \times (\text{Diameter})^2 \times 0.0408 = 0.58 \text{ gallons in one well volume} \\
 \text{TD} \quad \text{WL} \quad \text{Dia. Inches} \\
 1.73 \quad \quad \quad 3 \quad \quad \quad \text{gallons in 3 well volumes (Approx. 0.6 gal/ft)} \quad \quad \quad \text{total gallons purged}
 \end{array}$$

FIELD MEASUREMENTS DURING PURGING

Stable Field Parameters Required Prior to Sample Collection <10% pH and EC change, <0.2°C temp. change

Time	Gallons	pH	TEMP °C	ORP	DO mg/L	EC mS / µS	Turbidity H/M/L
12:45	1	7.20	19.3	85		1870	M/L
12:46	2	7.16	20.1	83		1861	L
12:46	3	7.17	20.5	81		1845	L

Minimum of 5 gallons or 0.6 gal/ft. Of water in casing - whichever is greater and field parameters must be stable.

Water Level Before Sampling: 5.75 Time: 2:25

Appearance of Sample:

Bailer: Disposable Pump: 12V Submersible (1-2 gpm)

DECON. METHOD: TSP or Liquinox (phosphate free) Wash / Double Rinse

NUMBER OF DRUMS GENERATED: Water: 3 Soil: X Other: X

GROUNDWATER FIELD SAMPLING FORM

WELL INFORMATION

Project Number/Name:	1301.01 Pipeline Excavators		Well Number: MW-6
Project Location:	5715 Sebastopol Road Sebastopol, California	Casing Diameter:	2"
		Well Depth from TOC (BP): 9, 10 Well Depth from TOC (AP):	
Date:	December 6, 2005	Top of Screen:	Initial Well Depth:
Sampled by (print and sign):	Brian Hasik <i>BH</i>		
Notes: DRY @ 2.5g Slight odor ??	Product Thickness in inches: 8 Water Level from TOC: 2.83 Time: 12:04 Water Level pre-purge: 2.83 Time: 12:15 Well Type: <input checked="" type="checkbox"/> Monitor <input type="checkbox"/> Extraction <input type="checkbox"/> Other: Well EL (TOC): Well Mat: PVC		

WEATHER

Wind: Yes / No	Clouds: Yes / No	Sun: Yes / No	Precipitation in last 5 days: Yes / No
Rain: Yes / No	Fog: Yes / No		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

$$\begin{array}{c}
 (\text{TD} - \text{WL}) \times (\text{Diameter})^2 \times 0.0408 = (\text{Volume}) \text{ gallons in one well volume} \\
 \text{TD} \quad \text{WL} \quad \text{Diameter Inches} \\
 3.00 \quad \quad \quad 2.5
 \end{array}$$

gallons in 3 well volumes (Approx. 0.6 gal/ft) 2.5 total gallons purged

FIELD MEASUREMENTS DURING PURGING

Stable Field Parameters Required Prior to Sample Collection <10% pH and EC change, <0.2°C temp. change

Time	Gallons	pH	TEMP °C	ORP	DO mg/L	EC mS / µS	Turbidity H/M/L
12:27	1	6.58	18.8	173		1453	L
12:28	2	6.60	20.0	84		1412	L
12:29	2.5	6.60	20.4	77		1358	L

Minimum of 5 gallons or 0.6 gal/ft. Of water in casing - whichever is greater and field parameters must be stable.

Water Level Before Sampling: 2.84 Time: 2:15

Appearance of Sample:

Bailer: Disposable Pump: 12V Submersible (1-2 gpm)

DECON. METHOD: TSP or Liquinox (phosphate free) Wash / Double Rinse

NUMBER OF DRUMS GENERATED: Water: 4 Soil: 8 Other: 8

GROUNDWATER FIELD SAMPLING FORM

WELL INFORMATION

Project Number/Name:	1301.01 Pipeline Excavators		Well Number:	MW-7
Project Location:	5715 Sebastopol Road Sebastopol, California	Casing Diameter:	2" Well Depth from TOC (BP): 9.90 Well Depth from TOC (AP):	
Date:	December 6, 2005	Top of Screen:	Initial Well Depth:	
Sampled by (print and sign):	Brian Hasik <i>(Signature)</i>	Product Thickness in inches:	<i>8</i>	
Notes:	<i>bc 3g</i>	Water Level from TOC:	<i>4.34</i>	Time: <i>12:09</i>
		Water Level pre-purge:	<i>4.34</i>	Time: <i>12:57</i>
		Well Type:	<input checked="" type="checkbox"/> Monitor <input type="checkbox"/> Extraction <input type="checkbox"/> Other:	
		Well EL (TOC):	Well Mat: PVC	

WEATHER

Wind: Yes / No	Clouds: Yes / No	Sun: <input checked="" type="checkbox"/> Yes / No	Precipitation in last 5 days: <input checked="" type="checkbox"/> Yes / No
Rain: Yes / No	Fog: Yes / No		

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING

(TD - WL) X (Dia. Inches)² X 0.0408 = 0.89 gallons in one well volume

2.67 gallons in 3 well volumes (Approx. 0.6 gal/ft) 3 total gallons purged

FIELD MEASUREMENTS DURING PURGING

Stable Field Parameters Required Prior to Sample Collection <10% pH and EC change, <0.2°C temp. change

Time	Gallons	pH	TEMP °C	ORP	DO mg/L	EC mS / µS	Turbidity H/M/L
1:02	1	6.56	19.7	126		1896	L
1:03	2	6.40	18.6	143		1945	L
1:04	3	6.51	19.1	192		1954	L

Minimum of 5 gallons or 0.6 gal/ft. Of water in casing - whichever is greater and field parameters must be stable.

Water Level Before Sampling: 4.36 Time: 2:35

Appearance of Sample:

Bailer: Disposable Pump: 12V Submersible (1-2 gpm)

DECON. METHOD: TSP or Liquinox (phosphate free) Wash / Double Rinse

NUMBER OF DRUMS GENERATED: Water: 3 Soil: 0 Other: 0

APPENDIX B

Category	Definition	Example
1. <i>Physical</i>	Physical damage to the body.	Fracture of bone.
2. <i>Chemical</i>	Chemical damage to the body.	Chemical burn.
3. <i>Biological</i>	Biological damage to the body.	Infection.
4. <i>Social</i>	Social damage to the body.	Domestic violence.
5. <i>Psychological</i>	Psychological damage to the body.	Post-traumatic stress disorder.
6. <i>Environmental</i>	Environmental damage to the body.	Exposure to toxic chemicals.
7. <i>Technological</i>	Technological damage to the body.	Robotics accidents.
8. <i>Space</i>	Space damage to the body.	Space exploration accidents.
9. <i>Time</i>	Time damage to the body.	Age-related diseases.
10. <i>Space-Time</i>	Space-time damage to the body.	Space-time anomalies.

Appendix B: Historical Groundwater Elevation and Gradient Data
Pipeline Excavators

Sample Date	Monitoring Well ID	TOC Elevation (feet - msl)	Water Level Depth (feet)	Water Level Elevation (feet -msl)	Groundwater Flow Direction/Gradient (i)
06/06/01	MW-1	68.71	3.03	65.68	N 82° E i = 0.023
	MW-2	68.15	3.06	65.09	
	MW-3	68.92	3.85	65.07	
07/23/01	MW-1	68.71	4.22	64.49	N73°E i = 0.013
	MW-2	68.15	4.35	63.80	
	MW-3	68.92	5.12	63.80	
08/29/01	MW-1	68.71	5.03	63.68	N65°E i = 0.01
	MW-2	68.15	5.06	63.09	
	MW-3	68.92	5.72	63.20	
09/13/01	MW-1	68.71	5.21	63.50	NA
	MW-2	68.15	NA	NA	
	MW-3	68.92	5.90	63.02	
10/24/01	MW-1	68.71	5.55	63.16	N58°E i = 0.01
	MW-2	68.15	5.61	62.54	
	MW-3	68.92	6.16	62.76	
12/13/01	MW-1	68.81	2.76	66.05	S30°W i = 0.002
	MW-2	68.93	2.54	66.39	
	MW-3	69.31	3.18	66.13	
1/23/01	MW-1	68.81	2.24	66.57	S40°W i = 0.004
	MW-2	68.93	2.22	66.71	
	MW-3	69.31	2.76	66.55	



Appendix B: continued

Sample Date	Monitoring Well ID	TOC Elevation (feet - msl)	Water Level Depth (feet)	Water Level Elevation (feet -msl)	Groundwater Flow Direction/Gradient (i)
2/21/02	MW-1	68.81	1.24	67.57	S45°W i = 0.006
	MW-2	68.93	1.16	67.77	
	MW-3	69.31	1.75	67.56	
	MW-4	72.04	4.09	67.95	
	MW-5	72.14	3.95	68.19	
	MW-6	68.16	1.05	67.11	
	MW-7	68.37	2.13	66.24	
03/13/02	MW-1	68.81	1.13	67.68	S45°W i = 0.006
	MW-2	68.93	1.18	67.75	
	MW-3	69.31	1.62	67.69	
	MW-4	72.04	4.03	68.01	
	MW-5	72.14	3.93	68.21	
	MW-6	68.16	0.96	67.20	
	MW-7	68.37	2.14	66.23	
04/24/02	MW-1	68.81	2.43	66.38	S40°W i = 0.005
	MW-2	68.93	2.46	66.47	
	MW-3	69.31	3.09	66.22	
	MW-4	72.04	5.73	66.31	
	MW-5	72.14	5.50	66.64	
	MW-6	68.16	2.31	65.85	
	MW-7	68.37	2.92	65.40	



Appendix B: continued

Sample Date	Monitoring Well ID	TOC Elevation (feet - msl)	Water Level Depth (feet)	Water Level Elevation (feet -msl)	Groundwater Flow Direction/Gradient (i)
05/20/02	MW-1	68.81	2.71	66.10	S35°W i = 0.007
	MW-2	68.93	3.61	65.32	
	MW-3	69.31	3.41	65.90	
	MW-4	72.04	6.05	65.99	
	MW-5	72.14	5.82	66.32	
	MW-6	68.16	2.69	65.47	
	MW-7	68.37	3.34	65.03	
07/16/02	MW-1	68.81	3.65	65.16	Southerly i = 0.007
	MW-2	68.93	3.67	65.26	
	MW-3	69.31	4.42	64.89	
	MW-4	72.04	7.11	64.93	
	MW-5	72.14	6.86	65.28	
	MW-6	68.16	3.72	64.44	
	MW-7	68.37	4.34	64.03	
09/06/02	MW-1	68.81	4.36	64.45	S35°W i = 0.005
	MW-2	68.93	4.45	64.48	
	MW-3	69.31	4.98	64.33	
	MW-4	72.04	7.78	64.26	
	MW-5	72.14	7.60	64.54	
	MW-6	68.16	3.97	64.19	
	MW-7	68.37	5.52	62.85	



Appendix B: continued

Sample Date	Monitoring Well ID	TOC Elevation (feet - msl)	Water Level Depth (feet)	Water Level Elevation (feet -msl)	Groundwater Flow Direction/Gradient (i)
12/18/02	MW-1	68.81	2.78	66.03	West / Southwest i = varies
	MW-2	68.93	2.56	66.37	
	MW-3	69.31	3.13	66.18	
	MW-4	72.04	5.31	66.73	
	MW-5	72.14	5.24	66.90	
	MW-6	68.16	2.11	66.05	
	MW-7	68.37	4.18	64.19	
03/19/03	MW-1	68.81	1.14	67.67	Southwest i = 0.01
	MW-2	68.93	1.16	67.77	
	MW-3	69.31	1.69	67.62	
	MW-4	72.04	4.11	67.93	
	MW-5	72.14	3.97	68.17	
	MW-6	68.16	1.06	67.10	
	MW-7	68.37	2.02	66.35	



Appendix B: continued

Sample Date	Monitoring Well ID	TOC Elevation (feet - msl)	Water Level Depth (feet)	Water Level Elevation (feet -msl)	Groundwater Flow Direction/Gradient (i)
07/09/03	MW-1	68.81	3.23	65.58	Westerly i = 0.004
	MW-2	68.93	3.24	65.69	
	MW-3	69.31	4.03	65.28	
	MW-4	72.04	6.71	65.33	
	MW-5	72.14	6.45	65.69	
	MW-6	68.16	3.15	65.01	
	MW-7	68.37	3.77	64.60	
09/16/03	MW-1	68.81	4.24	64.57	West/Southwest i = varies
	MW-2	68.93	4.43	64.50	
	MW-3	69.31	5.02	64.29	
	MW-4	72.04	7.76	64.28	
	MW-5	72.14	7.52	64.62	
	MW-6	68.16	4.16	64.00	
	MW-7	68.37	5.13	63.24	
12/02/03	MW-1	68.81	3.61	65.20	Westerly i = 0.04
	MW-2	68.93	3.40	65.53	
	MW-3	69.31	4.12	65.19	
	MW-4	72.04	6.42	65.62	
	MW-5	72.14	6.25	65.89	
	MW-6	68.16	3.01	65.15	
	MW-7	68.37	5.06	63.31	



Appendix B: continued

Sample Date	Monitoring Well ID	TOC Elevation (feet - msl)	Water Level Depth (feet)	Water Level Elevation (feet -msl)	Groundwater Flow Direction/Gradient, i (feet/foot)
3/31/04*	MW-1	70.83	1.40	69.43	Southwest to Northwest i = 0.02
	MW-2	70.95	1.47	69.48	
	MW-3	71.32	2.00	69.32	
	MW-4	74.05	4.49	69.56	
	MW-5	74.14	4.30	69.84	
	MW-6	70.16	0.45	69.71	
	MW-7	70.35	2.24	68.11	
* = wells were re-surveyed on February 24, 2004					
6/08/04	MW-1	70.83	3.50	67.33	Southwesterly i = 0.014
	MW-2	70.95	3.53	67.42	
	MW-3	71.32	4.28	67.04	
	MW-4	74.05	7.03	67.02	
	MW-5	74.14	6.75	67.39	
	MW-6	70.16	3.40	66.76	
	MW-7	70.35	4.13	66.22	
9/07/04	MW-1	70.83	5.22	65.61	S45°W i = 0.005
	MW-2	70.95	5.32	65.63	
	MW-3	71.32	5.96	65.36	
	MW-4	74.05	8.71	65.34	
	MW-5	74.14	8.55	65.59	
	MW-6	70.16	5.01	65.15	
	MW-7	70.35	6.22	65.13	



Appendix B: continued

Sample Date	Monitoring Well ID	TOC Elevation (feet - msl)	Water Level Depth (feet)	Water Level Elevation (feet -msl)	Groundwater Flow Direction/Gradient, i (feet/foot)	
12/09/04	MW-1	70.83	4.20	66.63	Southwesterly i = 0.007	
	MW-2	70.95	3.77	67.18		
	MW-3	----removed----				
	MW-4	74.05	6.54	67.51		
	MW-5	74.14	NA	NA		
	MW-6	70.16	3.60	66.56		
	MW-7	70.35	NA	NA		
03/31/05	MW-1	70.83	1.27	69.56	Southwesterly i = 0.008	
	MW-2	70.95	1.35	69.60		
	MW-3	----removed----				
	MW-4	74.05	4.00	70.05		
	MW-5	74.14	3.95	70.19		
	MW-6	70.16	1.05	69.11		
	MW-7	70.35	2.15	68.20		
06/27/05	MW-1	70.83	2.59	68.24	Southwesterly i = 0.02	
	MW-2	70.95	2.72	68.23		
	MW-3	----removed----				
	MW-4	74.05	6.23	67.82		
	MW-5	74.14	5.95	68.19		
	MW-6	70.16	2.32	67.84		
	MW-7	70.35	3.45	66.90		



Appendix B: continued

Sample Date	Monitoring Well ID	TOC Elevation (feet - msl)	Water Level Depth (feet)	Water Level Elevation (feet -msl)	Groundwater Flow Direction/Gradient (i)	
09/12/05	MW-1	70.83	4.14	66.69	Southwesterly i = 0.02	
	MW-2	70.95	4.42	66.53		
	MW-3	----removed----				
	MW-4	74.05	7.92	66.13		
	MW-5	74.14	7.68	66.46		
	MW-6	70.16	4.19	65.97		
	MW-7	70.35	5.24	65.11		
12/06/05	MW-1	70.83	2.99	67.84	Southwesterly i = 0.01	
	MW-2	70.95	2.78	68.17		
	MW-3	----removed----				
	MW-4	74.05	5.84	68.21		
	MW-5	74.14	5.73	68.41		
	MW-6	70.16	2.83	67.33		
	MW-7	70.35	4.34	66.01		



APPENDIX C



(301.01)

Report Number : 47282

Date : 12/14/2005

Brian Hasik
Trans Tech Consultants
930 Shiloh Rd., Building 44, Suite J
Windsor, CA 95492

Subject : 8 Water Samples
Project Name : PIPELINE EXCAVATORS
Project Number : 1301.01

Dear Mr. Hasik,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink that reads "Joel Kiff". Below the signature, the name "Joel Kiff" is printed in a small, black, sans-serif font.



Report Number : 47282

Date : 12/14/2005

Subject : 8 Water Samples
Project Name : PIPELINE EXCAVATORS
Project Number : 1301.01

Case Narrative

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample MW-5. These hydrocarbons are higher boiling than typical diesel fuel.

Approved By:

Joe Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800



Report Number : 47282

Date : 12/14/2005

Project Name : PIPELINE EXCAVATORS

Project Number : 1301.01

Sample : MW-1

Matrix : Water

Lab Number : 47282-01

Sample Date : 12/6/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Methyl-t-butyl ether (MTBE)	60	0.50	ug/L	EPA 8260B	12/10/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-Butanol	7.3	5.0	ug/L	EPA 8260B	12/10/2005
TPH as Gasoline	1200	50	ug/L	EPA 8260B	12/10/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	12/10/2005
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	12/10/2005
Dibromofluoromethane (Surr)	105		% Recovery	EPA 8260B	12/10/2005
1,2-Dichloroethane-d4 (Surr)	97.2		% Recovery	EPA 8260B	12/10/2005
TPH as Diesel	1500	50	ug/L	M EPA 8015	12/12/2005
Octacosane (Diesel Surrogate)	91.6		% Recovery	M EPA 8015	12/12/2005

Approved By:

Joel Kiff



Report Number : 47282

Date : 12/14/2005

Project Name : PIPELINE EXCAVATORS

Project Number : 1301.01

Sample : MW-2

Matrix : Water

Lab Number : 47282-02

Sample Date : 12/6/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Methyl-t-butyl ether (MTBE)	13	0.50	ug/L	EPA 8260B	12/10/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/10/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/10/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	12/10/2005
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	12/10/2005
Dibromofluoromethane (Surr)	106		% Recovery	EPA 8260B	12/10/2005
1,2-Dichloroethane-d4 (Surr)	99.5		% Recovery	EPA 8260B	12/10/2005
TPH as Diesel	130	50	ug/L	M EPA 8015	12/12/2005
Octacosane (Diesel Surrogate)	85.6		% Recovery	M EPA 8015	12/12/2005

Approved By:

Joe Kiff



Report Number : 47282

Date : 12/14/2005

Project Name : PIPELINE EXCAVATORS

Project Number : 1301.01

Sample : MW-4

Matrix : Water

Lab Number : 47282-03

Sample Date : 12/6/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Methyl-t-butyl ether (MTBE)	170	0.50	ug/L	EPA 8260B	12/10/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/10/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/10/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene - d8 (Surr)	98.6		% Recovery	EPA 8260B	12/10/2005
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	12/10/2005
Dibromofluoromethane (Surr)	105		% Recovery	EPA 8260B	12/10/2005
1,2-Dichloroethane-d4 (Surr)	99.6		% Recovery	EPA 8260B	12/10/2005
TPH as Diesel	150	50	ug/L	M EPA 8015	12/12/2005
Octacosane (Diesel Surrogate)	88.8		% Recovery	M EPA 8015	12/12/2005

Approved By:

Joel Kiff



Report Number : 47282

Date : 12/14/2005

Project Name : PIPELINE EXCAVATORS

Project Number : 1301.01

Sample : MW-5

Matrix : Water

Lab Number : 47282-04

Sample Date : 12/6/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Methyl-t-butyl ether (MTBE)	11	0.50	ug/L	EPA 8260B	12/10/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/10/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/10/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	12/10/2005
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	12/10/2005
Dibromofluoromethane (Surr)	104		% Recovery	EPA 8260B	12/10/2005
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	12/10/2005
TPH as Diesel	220	50	ug/L	M EPA 8015	12/14/2005
Octacosane (Diesel Surrogate)	94.8		% Recovery	M EPA 8015	12/14/2005

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Report Number : 47282

Date : 12/14/2005

Project Name : PIPELINE EXCAVATORS

Project Number : 1301.01

Sample : MW-6

Matrix : Water

Lab Number : 47282-05

Sample Date : 12/6/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Methyl-t-butyl ether (MTBE)	6.2	0.50	ug/L	EPA 8260B	12/12/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/12/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/12/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	12/12/2005
4-Bromofluorobenzene (Surr)	93.9		% Recovery	EPA 8260B	12/12/2005
Dibromofluoromethane (Surr)	110		% Recovery	EPA 8260B	12/12/2005
1,2-Dichloroethane-d4 (Surr)	108		% Recovery	EPA 8260B	12/12/2005
TPH as Diesel	69	50	ug/L	M EPA 8015	12/12/2005
Octacosane (Diesel Surrogate)	91.2		% Recovery	M EPA 8015	12/12/2005

Approved By:

Joel Kiff



Report Number : 47282

Date : 12/14/2005

Project Name : PIPELINE EXCAVATORS

Project Number : 1301.01

Sample : DW-6100

Matrix : Water

Lab Number : 47282-06

Sample Date : 12/6/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/10/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/10/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	12/10/2005
4-Bromofluorobenzene (Surr)	89.6		% Recovery	EPA 8260B	12/10/2005
Dibromofluoromethane (Surr)	97.1		% Recovery	EPA 8260B	12/10/2005
1,2-Dichloroethane-d4 (Surr)	98.2		% Recovery	EPA 8260B	12/10/2005
TPH as Diesel	< 50	50	ug/L	M EPA 8015	12/12/2005
Octacosane (Diesel Surrogate)	91.6		% Recovery	M EPA 8015	12/12/2005

Approved By:

Joe Kiff



Report Number : 47282

Date : 12/14/2005

Project Name : PIPELINE EXCAVATORS

Project Number : 1301.01

Sample : DW-6140

Matrix : Water

Lab Number : 47282-07

Sample Date : 12/6/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/10/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/10/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	12/10/2005
4-Bromofluorobenzene (Surr)	91.1		% Recovery	EPA 8260B	12/10/2005
Dibromofluoromethane (Surr)	100		% Recovery	EPA 8260B	12/10/2005
1,2-Dichloroethane-d4 (Surr)	99.3		% Recovery	EPA 8260B	12/10/2005
TPH as Diesel	< 50	50	ug/L	M EPA 8015	12/12/2005
Octacosane (Diesel Surrogate)	90.6		% Recovery	M EPA 8015	12/12/2005

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Report Number : 47282

Date : 12/14/2005

Project Name : PIPELINE EXCAVATORS

Project Number : 1301.01

Sample : MW-7

Matrix : Water

Lab Number : 47282-08

Sample Date : 12/6/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Methyl-t-butyl ether (MTBE)	41	0.50	ug/L	EPA 8260B	12/10/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/10/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/10/2005
1,2-Dichloroethane	4.4	0.50	ug/L	EPA 8260B	12/10/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	12/10/2005
4-Bromofluorobenzene (Surr)	91.5		% Recovery	EPA 8260B	12/10/2005
Dibromofluoromethane (Surr)	101		% Recovery	EPA 8260B	12/10/2005
1,2-Dichloroethane-d4 (Surr)	97.5		% Recovery	EPA 8260B	12/10/2005
TPH as Diesel	< 50	50	ug/L	M EPA 8015	12/12/2005
Octacosane (Diesel Surrogate)	88.8		% Recovery	M EPA 8015	12/12/2005

Approved By:

Joel Kiff

QC Report : Method Blank Data
Project Name : PIPELINE EXCAVATORS
Project Number : 1301.01

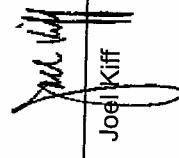
Report Number : 47282
 Date : 12/14/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed	Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	12/9/2005	4-Bromofluorobenzene (Surrogate)	102	%	EPA 8260B	12/10/2005	
Octacosane (Diesel Surrogate)	92.4	%		M EPA 8015	12/9/2005	Dibromoformmethane (Surrogate)	102	%	EPA 8260B	12/10/2005	
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	1,2-Dichloroethane-d4 (Surrogate)	101	%	EPA 8260B	12/10/2005	
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Ter-t-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/10/2005	Ter-t-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/10/2005	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/10/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/10/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
Toluene - d8 (Surrogate)	103	%		EPA 8260B	12/10/2005	1,2-Dibromomethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005
4-Bromofluorobenzene (Surrogate)	102	%		EPA 8260B	12/10/2005	Toluene - d8 (Surrogate)	104	%	EPA 8260B	12/10/2005	
Dibromoformmethane (Surrogate)	105	%		EPA 8260B	12/10/2005	4-Bromofluorobenzene (Surrogate)	92.7	%	EPA 8260B	12/10/2005	
1,2-Dichloroethane-d4 (Surrogate)	97.6	%		EPA 8260B	12/10/2005	Dibromoformmethane (Surrogate)	101	%	EPA 8260B	12/10/2005	
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	1,2-Dichloroethane-d4 (Surrogate)	102	%	EPA 8260B	12/10/2005	
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Ter-t-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/10/2005	Ter-t-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/10/2005	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/12/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/12/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/10/2005	1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005
Toluene - d8 (Surrogate)	99.5	%		EPA 8260B	12/10/2005	1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/12/2005

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:



Joel Kiff

QC Report : Method Blank Data
Project Name : PIPELINE EXCAVATORS
Project Number : 1301.01

Report Number : 47282
Date : 12/14/2005

Parameter	Measured Value	Method Limit	Reporting Units	Analysis Method	Date Analyzed	Parameter	Measured Value	Method Limit	Reporting Units	Analysis Method	Date Analyzed
Toluene - d8 (Surrogate)	99.3	%	%	EPA 8260B	12/12/2005						
4-Bromofluorobenzene (Surrogate)	95.7	%	%	EPA 8260B	12/12/2005						
Dibromofluoromethane (Surrogate)	107	%	%	EPA 8260B	12/12/2005						
1,2-Dichloroethane-d4 (Surrogate)	106	%	%	EPA 8260B	12/12/2005						

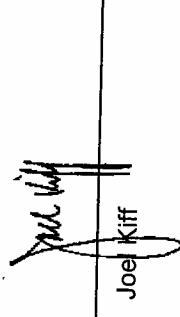
KIFF ANALYTICAL, LLC
2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joel Kiff
Joel Kiff

Project Name : PIPELINE EXCAVATORS
Project Number : 1301.01

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Units	Analysis Method	Date Analyzed	Duplicate Spiked Sample Percent Recov.			Spiked Sample Percent Recov.	Relative Percent Diff.
									Duplicate Spiked Sample Value	Spiked Sample Percent Recov.	Sample Percent Recov.		
TPH as Diesel	Blank	<50	1000	1000	856	913	ug/L	EPA 8015	12/9/05	85.6	91.3	6.43	70-130 25
Benzene	47301-08	<0.50	40.0	40.0	32.6	30.4	ug/L	EPA 8260B	12/10/05	81.4	76.1	6.68	70-130 25
Toluene	47301-08	<0.50	40.0	40.0	33.6	32.0	ug/L	EPA 8260B	12/10/05	84.0	80.1	4.73	70-130 25
Tert-Butanol	47301-08	<5.0	200	200	183	172	ug/L	EPA 8260B	12/10/05	91.6	85.9	6.41	70-130 25
Methyl-t-Butyl Ether	47301-08	1.9	40.0	40.0	37.1	35.0	ug/L	EPA 8260B	12/10/05	88.0	82.6	6.24	70-130 25
Benzene	47301-03	<0.50	40.0	40.0	36.5	35.8	ug/L	EPA 8260B	12/10/05	91.3	89.5	2.04	70-130 25
Toluene	47301-03	<0.50	40.0	40.0	37.6	36.2	ug/L	EPA 8260B	12/10/05	94.1	90.6	3.82	70-130 25
Tert-Butanol	47301-03	<5.0	200	200	191	194	ug/L	EPA 8260B	12/10/05	95.7	97.2	1.56	70-130 25
Methyl-t-Butyl Ether	47301-03	<0.50	40.0	40.0	31.4	31.1	ug/L	EPA 8260B	12/10/05	78.6	77.7	1.14	70-130 25
Benzene	47292-03	2.5	40.0	40.0	37.2	36.6	ug/L	EPA 8260B	12/10/05	86.6	85.1	1.79	70-130 25
Toluene	47292-03	1.8	40.0	40.0	39.5	39.9	ug/L	EPA 8260B	12/10/05	94.3	95.3	1.00	70-130 25
Tert-Butanol	47292-03	<5.0	200	200	194	198	ug/L	EPA 8260B	12/10/05	97.2	98.8	1.62	70-130 25
Methyl-t-Butyl Ether	47292-03	8.4	40.0	40.0	42.9	40.2	ug/L	EPA 8260B	12/10/05	86.2	79.5	8.09	70-130 25
Benzene	47359-07	1.4	40.0	40.0	43.5	42.1	ug/L	EPA 8260B	12/12/05	105	102	3.54	70-130 25
Toluene	47359-07	<0.50	40.0	40.0	41.1	39.8	ug/L	EPA 8260B	12/12/05	103	99.6	3.23	70-130 25
Tert-Butanol	47359-07	<5.0	200	200	205	200	ug/L	EPA 8260B	12/12/05	102	99.8	2.60	70-130 25
Methyl-t-Butyl Ether	47359-07	<0.50	40.0	40.0	41.0	41.5	ug/L	EPA 8260B	12/12/05	102	104	1.22	70-130 25

KIFF ANALYTICAL, LLC
2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800Approved By: 
Joel Kiff

Project Name : PIPELINE EXCAVATORS
 Project Number : 1301.01

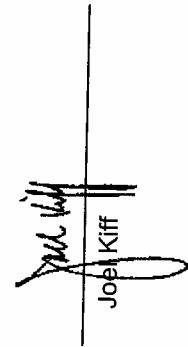
Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	12/10/05	89.7	70-130
Toluene	40.0	ug/L	EPA 8260B	12/10/05	93.0	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/10/05	96.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/10/05	111	70-130
Benzene	40.0	ug/L	EPA 8260B	12/10/05	97.8	70-130
Toluene	40.0	ug/L	EPA 8260B	12/10/05	98.8	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/10/05	100	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/10/05	96.4	70-130
Benzene	40.0	ug/L	EPA 8260B	12/10/05	90.3	70-130
Toluene	40.0	ug/L	EPA 8260B	12/10/05	98.9	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/10/05	96.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/10/05	80.9	70-130
Benzene	40.0	ug/L	EPA 8260B	12/12/05	106	70-130
Toluene	40.0	ug/L	EPA 8260B	12/12/05	104	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/12/05	101	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/12/05	107	70-130

KIFF ANALYTICAL, LLC
 2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800
 Approved By:

KIFF ANALYTICAL, LLC

Approved By:

Joe Kiff





2795 2nd Street Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4802

Project Contact (Hardcopy or PDF To):
Brian Hasik

Company / Address:

930 Shatto Rd., Building 44, Suite J, Windsor, CA 95492

Phone #: (707) 575-8622 Fax #: 707-837-7334

Project #: 1301-01 P.O. #

Pipeline Excavators
Project Name:
Project Address:
5715 Sebastopol Rd.
Sebastopol, CA

California EDF Report? Yes No

SRG # / Lab No.

417282

Sampling Company Log Code:

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			<input type="checkbox"/> 915 yrs	<input type="checkbox"/> 920 yrs	

APPENDIX D

Appendix D: Historical Groundwater Analytical Results

Sample Date	Sample ID	TPH-gasoline	TPH-diesel	TPH-motor oil	B	T	E	X	MtBE
		µg/L							
09/18/00	MW-1	4,500	2,200*	NA	<5.0	<5.0	<5.0	<15	230
	MW-2	<50	<50	NA	<0.5	<0.5	<0.5	<1.5	26
	MW-3	69,000	35,000*	NA	8,400	20,000	1,500	6,500	500
06/06/01	MW-1	1,800	360*	NA	<1.0	<1.0	7.4	<1.0	180
	MW-2	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	43
	MW-3	73,000	2,300*	NA	12,000	34,000	1,900	8,600	480
	DW-6100	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	<1.0
06/07/01	DW-6140	<50	<50	NA	<1.0	<5.0	<5.0	<5.0	52
09/13/01	MW-1	2,000	610*	NA	<2.0	<2.0	3.9	2.9	96
	MW-2	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	10
	MW-3	55,000	2,400*	NA	8,300	18,000	1,000	3,800	1,100
	DW-6100	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	<1.0
	DW-6140	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	22
12/13/01	MW-1	3,700	1,600*	NA	59	120	31	59	130
	MW-2	120	<50	NA	9.3	33	3.1	13	14
	MW-3	71,000	2,500*	NA	11,000	19,000	1,400	6,000	260
	DW-6100	<50	<50	NA	<0.5	<0.5	<0.5	<1.5	<1.0
	DW-6140	<50	<50	NA	<0.5	<0.5	<0.5	<1.5	15

* = Higher boiling point constituents of gasoline are present.



Appendix D: continued

Sample Date	Sample ID	TPH-gasoline	TPH-diesel	TPH-motor oil	B	T	E	X	MtBE
		µg/L							
02/21/02	MW-1	3,700	1,300*	<100	8.5	38	16	13	200
	MW-2	69	<50	<100	2.4	14	1.1	5.1	29
	MW-3	130,000	2,300*	<1,000	9,200	21,000	1,800	6,900	430
	MW-4	<50	<50	<100	<0.30	<0.30	<0.50	<0.50	5.0
	MW-5	<50	<50	<100	<0.30	<0.30	<0.50	<0.50	45
	MW-6	140	63	<100	<0.30	3.0	<0.50	<0.50	120**
	MW-7	<50	<50	<100	1.2	7.6	0.70	3.5	2.9***
05/20/02	MW-1	3,300	1,200*	NA	<30	<30	<50	<50	210
	MW-2	<50	<50	NA	<0.30	<0.30	<0.50	<0.50	21
	MW-3	150,000	4,800*	NA	9,500	27,000	1,900	7,900	370***
	MW-4	<50	54	NA	<0.30	<0.30	<0.50	<0.50	4.0
	MW-5	<50	<50	NA	<0.30	<0.30	<0.50	<0.50	68
	MW-6	84	55	NA	<0.30	<0.30	<0.50	<0.50	49
	MW-7	<50	<50	NA	<0.30	<0.30	<0.50	<0.50	37***
	DW-6140	<50	<50	<50	<0.30	<0.30	<0.50	<0.50	18
09/06/02	DW-6100	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	<1.0
09/06/02	MW-1	3,500	1,000*	NA	<2.0	<2.0	2.9	<2.0	130
	MW-2	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	16
	MW-3	85,000	6,600*	NA	8,500	21,000	1,500	6,400	340
	MW-4	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	34
	MW-5	65	<50	NA	<1.0	<1.0	<1.0	<1.0	65
	MW-6	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	11
	MW-7	<50	<50	NA	1.5	4.3	<1.0	4.3	5.7

* = Higher boiling point constituents of gasoline are present.
** = Additional oxygenated fuel additives detected (see laboratory reports).
*** = 1,2-Dichloroethane (a lead scavenger) detected (see laboratory reports).



Appendix D: continued

Sample Date	Sample ID	TPH-gasoline	TPH-diesel	TPH-motor oil	B	T	E	X	MtBE
		µg/L							
12/18/02	MW-1	3,500	970*	NA	<2.0	<2.0	<2.0	<2.0	150
	MW-2	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	23
	MW-3	69,000	6,500*	NA	11,000	17,000	1,100	4,700	310
	MW-4	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	34
	MW-5	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	56
	MW-6	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	10
	MW-7	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	6.8**
	DW-6100	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	<1.0
03/19/03	MW-1	3,400	1,700*	NA	<2.0	<2.0	3.5	<2.0	180
	MW-2	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	21
	MW-3	59,000	12,000*	NA	10,000	19,000	1,400	5,500	450
	MW-4	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	5.1
	MW-5	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	23
	MW-6	61	<50	NA	<1.0	<1.0	<1.0	<1.0	19
	MW-7	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	12**
	DW-6140	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	<1.0
03/20/03	DW-6100	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	<1.0

* = Higher boiling point constituents of gasoline are present.

** = 1,2-Dichloroethane (a lead scavenger) detected (see laboratory reports).



Appendix D: continued

Sample Date	Sample ID	TPH-gasoline	TPH-diesel	TPH-motor oil	B	T	E	X	MtBE
		µg/L							
07/09/03	MW-1	1,900	1,000*	NA	<2.0	<2.0	<2.0	<2.0	99
	MW-2	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	17
	MW-3	49,000	12,000*	NA	9,300	23,000	1,400	6,100	230**
	MW-4	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	3.7
	MW-5	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	22
	MW-6	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	9.4
	MW-7	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	10**
	DW-6140	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	4.0
07/25/03	DW-6100	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	<1.0
09/18/03	MW-1	2,200	1,100*	NA	<2.0	<2.0	<2.0	<2.0	140
	MW-2	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	14
	MW-3	55,000	6,800*	NA	9,400	22,000	1,500	6,400	270**
	MW-4	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	17
	MW-5	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	31
	MW-6	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	4.8
	MW-7	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	4.1**
	DW-6140	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	17
	DW-6100	<50	<50	NA	<1.0	<1.0	<1.0	<1.0	<1.0

* = Higher boiling point constituents of gasoline are present.

** = 1,2-Dichloroethane (a lead scavenger) detected (see laboratory reports).



Appendix D: continued

Sample Date	Sample ID	TPH-gasoline	TPH-diesel	B	T	E	X	MtBE
		µg/L						
12/02/03	MW-1	2,000	800*	<2.0	<2.0	<2.0	<2.0	130
	MW-2	<50	<50	<1.0	<1.0	<1.0	<1.0	12
	MW-3	75,000	6,100*	8,100	15,000	1,500	6,500	300**
	MW-4	<50	<50	<1.0	<1.0	<1.0	<1.0	30
	MW-5	<50	<50	<1.0	<1.0	<1.0	<1.0	28
	MW-6	<50	<50	<1.0	<1.0	<1.0	<1.0	4.5
	MW-7	<50	<50	<1.0	<1.0	<1.0	<1.0	3.5***
	DW-6140	<50	<50	<1.0	<1.0	<1.0	<1.0	4.8
	DW-6100	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0
3/31/04	MW-1	3,600	890	<6.0	<6.0	<10	<10	140
	MW-2	<50	<50	<1.5	<1.5	<2.5	<2.5	19
	MW-3	68,000	7,400	8,600	19,000	3000	11,000	390
	MW-4	<50	<50	<0.6	0.68	<1.0	<1.0	2.6
	MW-5	<50	<50	<0.6	<0.6	<1.0	<1.0	19
	MW-6	<50	54	0.96	3.5	<1.0	<1.0	16
	MW-7	<50	<50	<0.3	<0.3	<0.5	<0.5	9.8
	DW-6140	<50	<50	<0.3	<0.3	<0.5	<0.5	0.53
	DW-6100	<50	<50	<0.3	<0.3	<0.5	<0.5	<0.5

< = Less than the laboratory test method detection limit.
 * = Higher boiling components of gasoline are present in the early boiling range for diesel.
 ** = 1,2-Dichloroethane was detected at 130 µg/L.
 *** = 1,2-Dichloroethane was detected at 5.9 µg/L.



Appendix D: continued

Sample Date	Sample ID	TPH- g	TPH- d	B	T	E	X	MtBE
		µg/L						
6/08/04	MW-1	1,700	570	<3.0	<3.0	<5.0	<5.0	110
	MW-2	<50	<50	<0.60	<0.60	<1.0	<1.0	13
	MW-3	160,000	5,800	10,000	22,000	1,400	6,500	<500**
	MW-4	<50	<50	<1.5	<1.5	<2.5	<2.5	11
	MW-5	<50	<50	<1.5	<1.5	<2.5	<2.5	20
	MW-6	<50	<50	<0.30	<0.30	<0.50	<0.50	7.4
	MW-7	<50	<50	<0.30	<0.30	<0.50	<0.50	5.4
	DW-6140	<50	<50	<0.30	<0.30	<0.50	<0.50	7.9
	DW-6100	<50	<50	<0.30	<0.30	<0.50	<0.50	<0.50

<	= Less than the laboratory test method detection limit.
**	= Elevated detection limit to account for matrix interference.

9/07/04	MW-1	2,300	370*	<3.0	<3.0	<5.0	<5.0	100
	MW-2	<50	<50	<0.60	<0.60	<1.0	<1.0	8.6
	MW-3	140,000	5,300*	13,000	28,000	1,800	7,300	320
	MW-4	<50	89	<0.30	<0.30	<0.50	<0.50	220
	MW-5	<50	<50	<0.30	<0.30	<0.50	<0.50	19
	MW-6	<50	<50	<0.30	<0.30	<0.50	<0.50	2.6
	MW-7	<50	<50	<0.30	<0.30	<0.50	<0.50	8.4 +
	DW-6140	<50	<50	<0.30	<0.30	<0.50	<0.50	7.1
	DW-6100	<50	<50	<0.30	<0.30	<0.50	<0.50	<0.50

<	= Less than the laboratory test method detection limit.
+	= 1,2-Dichloroethane (a lead scavenger) was detected at 3.5 µg/L.
*	= Results in the diesel organics range are primarily due to overlap from a gasoline range product.
**	= Elevated detection limit to account for matrix interference.



Appendix D: continued

Sample Date	Sample ID	TPH- g	TPH- d	B	T	E	X	MtBE
		µg/L						
12/09/04	MW-1**	2,000	220*	<1.5	<1.5	<2.5	<2.5	86
	MW-2	<50	<50	<0.30	<0.30	<0.50	<0.50	9.9
	MW-3	----removed----						
	MW-4***	<250	<50	<1.5	<1.5	<2.5	<2.5	86
	MW-5	NS	NS	NS	NS	NS	NS	NS
	MW-6	<50	<50	<0.30	<0.30	<0.50	<0.50	2.7
	MW-7	NS	NS	NS	NS	NS	NS	NS
	DW-6140	NS	NS	NS	NS	NS	NS	NS
	DW-6100	<50	<50	<0.30	<0.30	<0.50	<0.50	<0.50

NS = not sampled.

< = less than the laboratory test method detection limit.

* = results in the diesel organics range are primarily due to overlap from a gasoline range product.

** = elevated detection limit to account for matrix interference.

*** = the reporting limits are elevated due to sample foaming.

03/31/05	MW-1***	2,300	860*	<6.0	<6.0	<10	<10	89
	MW-2	<50	<50	<0.30	<0.30	<0.50	<0.50	34
	MW-3	----removed----						
	MW-4	<50	<50	<0.30	<0.30	<0.50	<0.50	8.2
	MW-5***	<1,000	<50	<6.0	<6.0	<10	<10	<10
	MW-6	<50	<50	<0.30	<0.30	<0.50	<0.50	8.8
	MW-7	<50	<50	<0.30	<0.30	<0.50	<0.50	32+
	DW-6100	<50	<50	<0.30	<0.30	<0.50	<0.50	<0.50
	DW-6140	<50	<50	<0.30	<0.30	<0.50	<0.50	0.58

NS = Not sampled.

< = Less than the laboratory test method detection limit.

+ = 1,2-Dichloroethane detected at 5.0 µg/L.

* = Results in the diesel organics range are primarily due to overlap from a gasoline range product.

** = Elevated detection limit to account for matrix interference.

*** = The reporting limits are elevated due to sample foaming.



Appendix D: continued

Sample Date	Sample ID	TPH-g	TPH-d	B	T	E	X	MtBE
		µg/L						
06/27/05	MW-1	1,400	190*	<0.30	0.39	<0.50	<0.50	40
	MW-2	<50	<50	<0.30	<0.30	<0.50	<0.50	31
	MW-3	----removed----						
	MW-4	<50	<50	<0.30	<0.30	<0.50	<0.50	45
	MW-5	<50	<50	<0.30	<0.30	<0.50	<0.50	15
	MW-6	68	<50	<0.30	<0.30	<0.50	<0.50	8.9
	MW-7	<50	<50	<0.30	<0.30	<0.50	<0.50	39 +
	DW-6100	<50	<50	<0.30	<0.30	<0.50	<0.50	
	DW-6140	<50	<50	<0.30	<0.30	<0.50	<0.50	
<p>< = Less than the laboratory test method detection limit. + = 1,2-Dichloroethane detected at 5.6 µg/L. * = Analysis of this sample indicates the presence of hydrocarbons lower in molecular weight than diesel.</p>								
09/12/05	MW-1	1,300	230*	<6.0	<6.0	<10	<10	43
	MW-2	<500	97	<3.0	<3.0	<5.0	<5.0	19
	MW-3	----removed----						
	MW-4	<1000	<100	<6.0	<6.0	<10	<10	34
	MW-5	<50	550**	<0.30	<0.30	<0.50	<0.50	17
	MW-6	<93***	<50	<0.30	<0.30	<0.50	<0.50	2.7
	MW-7	<100	<50	<0.30	<0.30	<0.50	<0.50	43 +
	DW-6100	<50	<50	<0.30	<0.30	<0.50	<0.50	<0.50
	DW-6140	<50	<50	<0.30	<0.30	<0.50	<0.50	<0.50
<p>< = Less than the laboratory test method detection limit. + = 1,2-Dichloroethane detected at 7.4 µg/L. * = Analysis of this sample indicates the presence of hydrocarbons lower in molecular weight than diesel. ** = Results in the diesel organics range are primarily due to overlap from a heavy oil range product. *** = The method blank contains analyte at a concentration above the MRL; sample reporting limits were raised as necessary.</p>								



Appendix D: continued

Sample Date	Sample ID	TPH - g	TPH - d	B	T	E	X	MtBE
		µg/L						
12/06/05	MW-1	1,200	1,500	<0.50	<0.50	<0.50	<0.50	60 *
	MW-2	<50	130	<0.50	<0.50	<0.50	<0.50	13
	MW-3	----removed----						
	MW-4	<50	150	<0.50	<0.50	<0.50	<0.50	170
	MW-5	<50	220**	<0.50	<0.50	<0.50	<0.50	11
	MW-6	<50	69	<0.50	<0.50	<0.50	<0.50	6.2
	MW-7	<50	<50	<0.30	<0.30	<0.50	<0.50	41 +
	DW-6100	<50	<50	<0.30	<0.30	<0.50	<0.50	<0.50
	DW-6140	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50

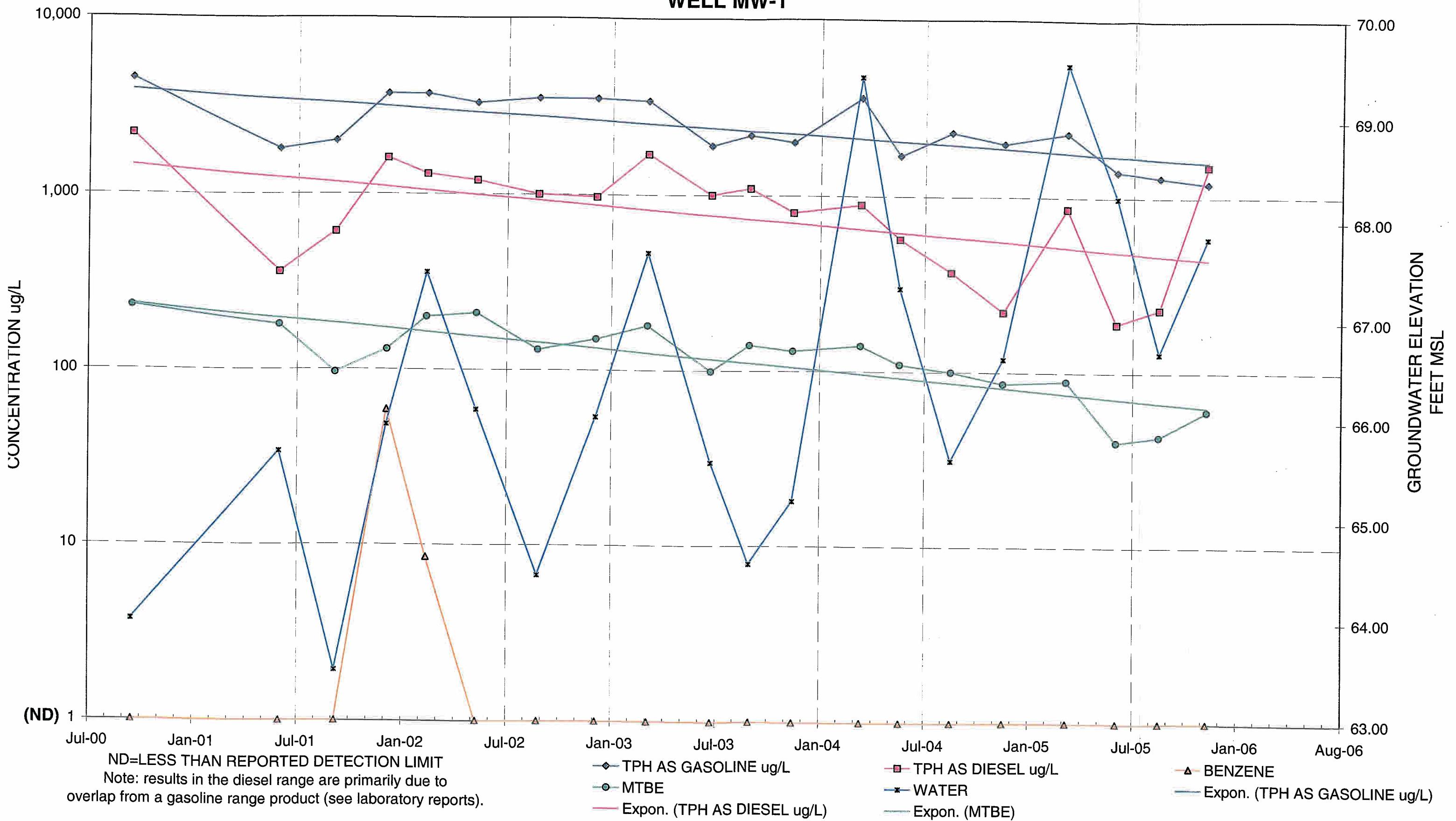
< = Less than the laboratory test method detection limit.
 + = 1,2-Dichloroethane detected at 4.4 µg/L.
 * = Tert-butyl alcohol (TBA) detected at 7.3 µg/L.
 ** = Hydrocarbons reported as TPH as diesel do not exhibit a typical diesel chromatographic pattern. These hydrocarbons are higher boiling than typical diesel fuel.



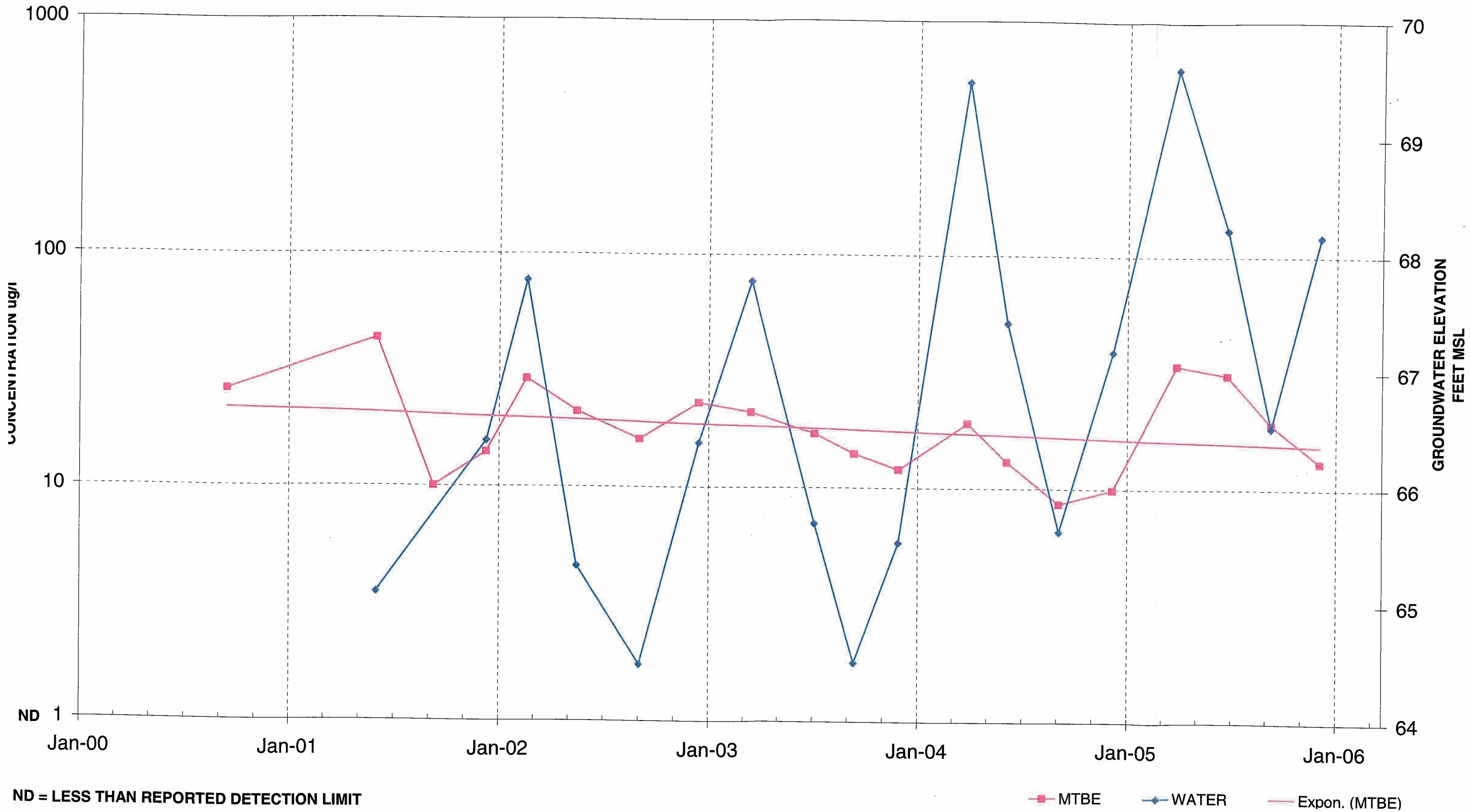
APPENDIX E

(Continued)

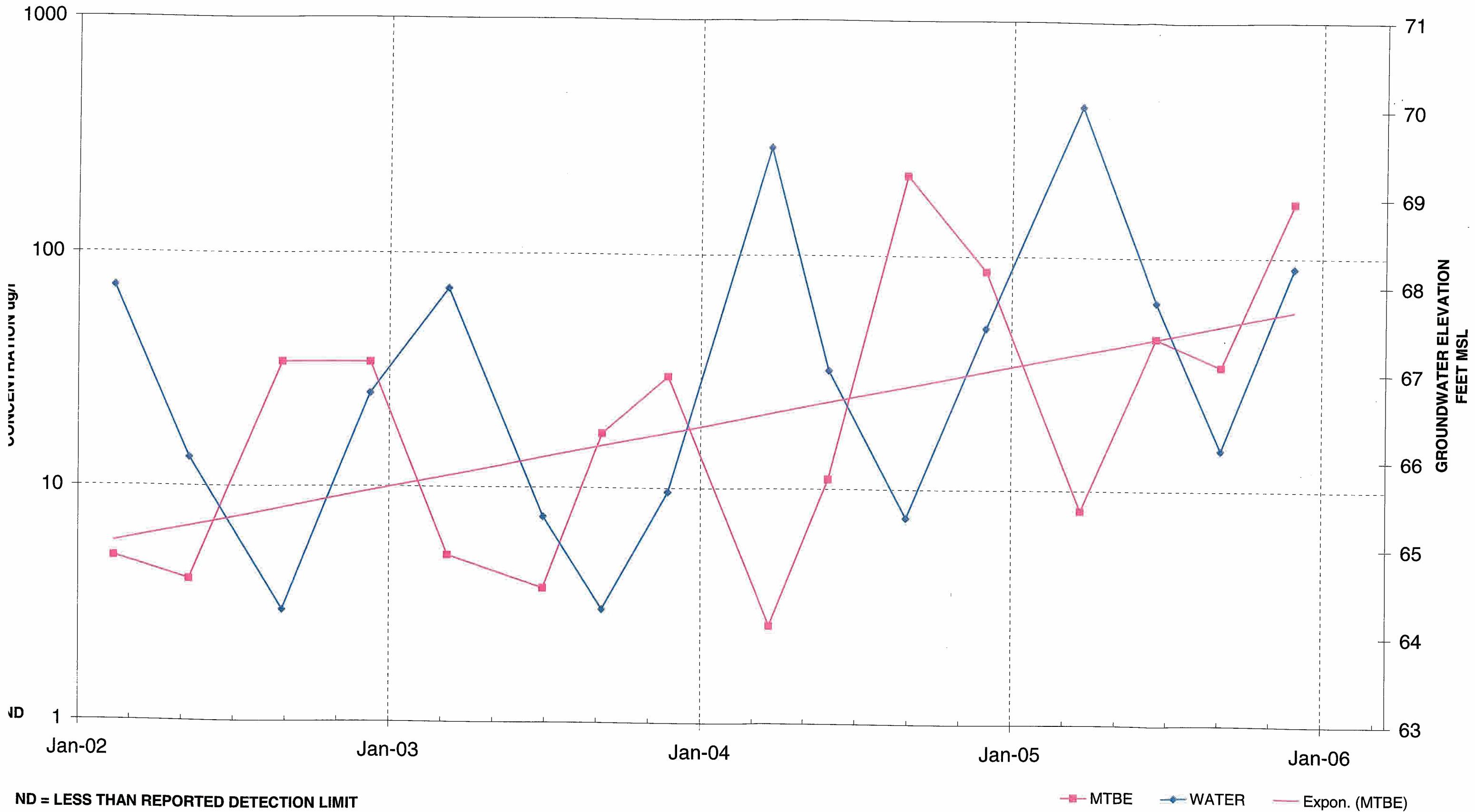
TIME vs. CONCENTRATION GRAPH
PIPELINE EXCAVATORS 5715 SEBASTOPOPL ROAD, SEBASTOPOL
TTC Job No. 1301.01
WELL MW-1



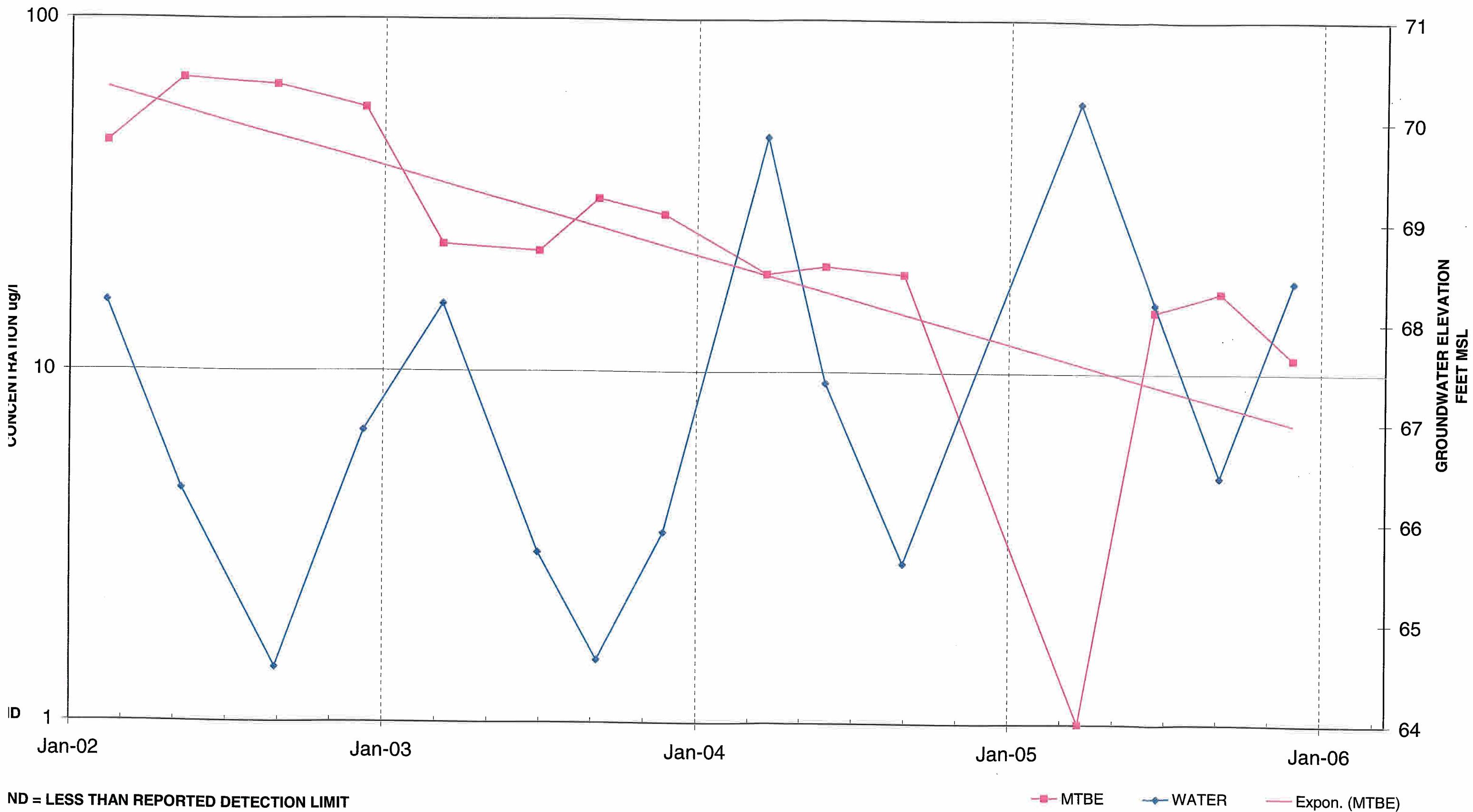
TIME vs. MTBE CONCENTRATION GRAPH
PIPELINE EXCAVATORS 5715 SEBASTOPOL ROAD, SEBASTOPOL
TTC JOB NO. 1301.01
MW-2



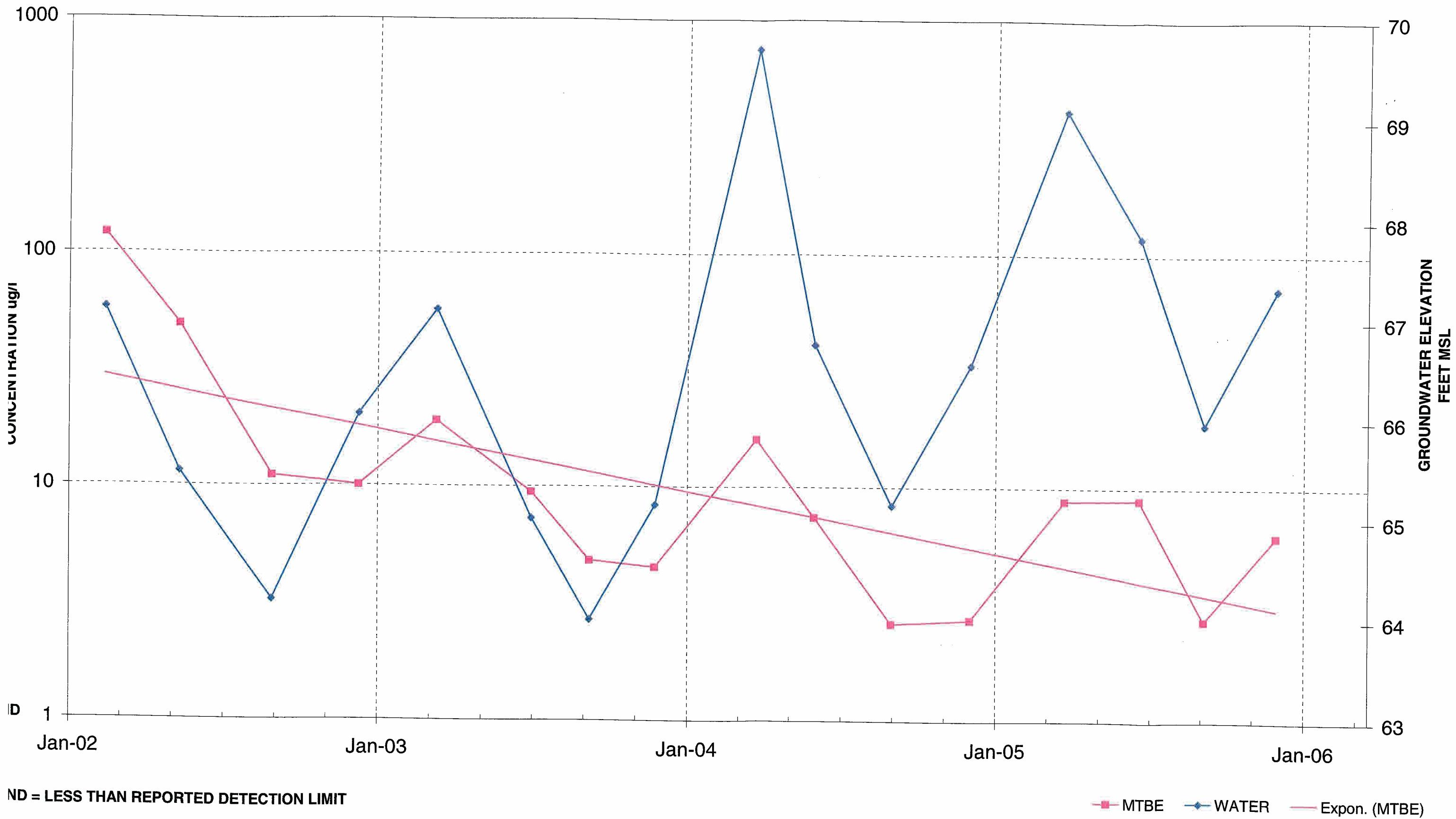
TIME vs. MTBE CONCENTRATION GRAPH
PIPELINE EXCAVATORS 5715 SEBASTOPOL ROAD, SEBASTOPOL
TTC JOB NO. 1301.01
MW-4



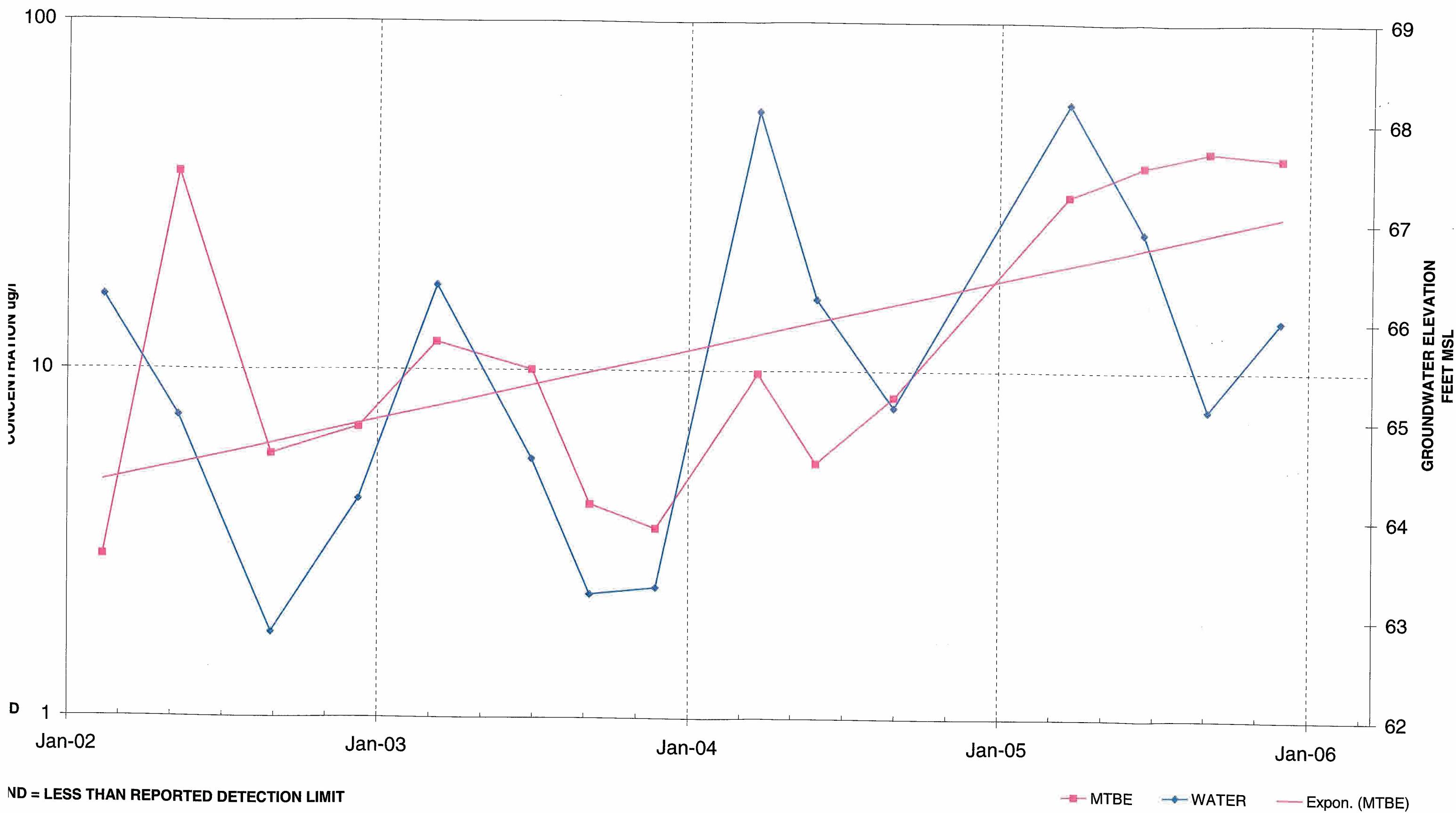
TIME vs. MTBE CONCENTRATION GRAPH
PIPELINE EXCAVATORS 5715 SEBASTOPOL ROAD, SEBASTOPOL
TTC JOB NO. 1301.01
MW-5



TIME vs. MTBE CONCENTRATION GRAPH
PIPELINE EXCAVATORS 5715 SEBASTOPOL ROAD, SEBASTOPOL
TTC JOB NO. 1301.01
MW-6



TIME vs. MTBE CONCENTRATION GRAPH
PIPELINE EXCAVATORS 5715 SEBASTOPOL ROAD, SEBASTOPOL
TTC JOB NO. 1301.01
MW-7



**DISTRIBUTION LIST
FOR
4TH QUARTER 2005 MONITORING REPORT**

**PIPELINE EXCAVATORS
5715 SEBASTOPOL ROAD
SEBASTOPOL, CALIFORNIA 95473**

**DATED FEBRUARY 15, 2006
JOB NO. 1301.01**

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